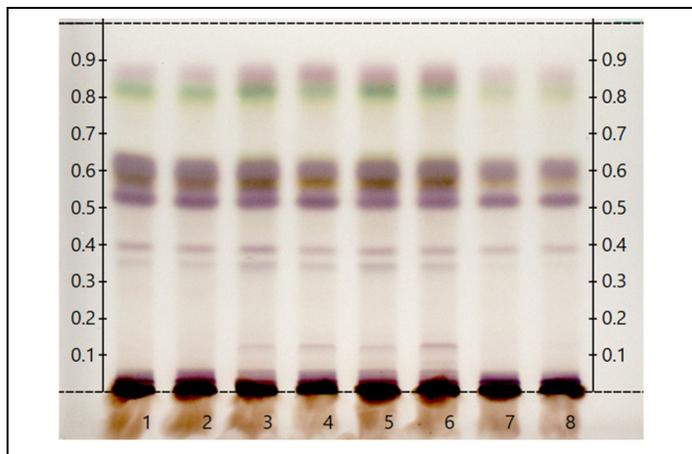


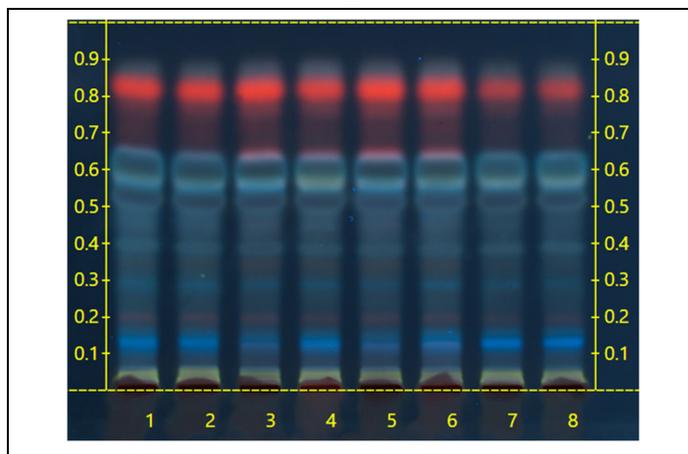


Certificate of Analysis: Mitragyna Speciosa, Dry Leaf (1140201210)
High Performance Thin-Layer Chromatography with Photo-Documentation

1



2



Company Name: Ethos Natural Medicine LLC
Title: Mitragyna Speciosa, Dry Leaf
Plant Part: leaf
Sample Received: 01/15/21
Sample Packaging: Clear Reclosable Plastic Bag
Form of Botanical: crude plant powder
Appearance: Fine Green Powder
Lot Number: (1140201210) → Lane 6(3µl)
Sample: 21015MSN_2
Latin Name: *Mitragyna speciosa*
Reference Sample: Lane 1 (3µl) (WO12515KMD1), Lane 2(3µl) (WO12515KMD1) *Mitragyna speciosa* (leaf); Lane 7(3µl) (WO08909MIC), Lane 8(3µl) (WO08909MIC) *Mitragyna speciosa* (herb (leaf, stem)); held at Alkemist Labs, Garden Grove, CA.
Analyst: A. Davis, N. Afendikova, M. Edwards, S. Kabbaj, N. Hoang, K. Tran, J. Lopez, J. Mares 150432
Sample Preparation: 0.3g+3mL Methanol, sonicate/heat at 50°C for 30 min.
Stationary Phase: Silica gel 60, HPTLC plates
Mobile Phase: toluene: ethyl acetate: diethylamine [7/2/1]
Detection: (1) 10% Sulfuric, 100°C, 2min, Vis (Reich, E., 2007)
(2) 10% Sulfuric, 100°C, 2min, 366nm (Reich, E., 2007)
Reference Source: Method Developed by Alkemist Labs
IDT-SOP-72-01

Comments & Conclusions: Lane 6 is the test sample *Mitragyna Speciosa*, Dry Leaf (1140201210). Lanes 1, 2, 7, 8, are the reference samples used for comparison. This test sample, *Mitragyna Speciosa*, Dry Leaf (1140201210) is consistent with the chromatographic profile of the reference samples of *Mitragyna speciosa*, used above. **This test sample *Mitragyna Speciosa*, Dry Leaf (1140201210) has characteristics of *Mitragyna speciosa* leaf.**

NOTE: The above conclusion may be a function of the natural variance found in botanicals &/or the extraction process used to create specific extracts. The growing and drying conditions, age, seasonal variations, geographic location, extraction solvents, etc. all play a role in the phytochemical fingerprint of botanicals as well as their extracts; hence, chromatographic variations are expected.

Examined, Reviewed & Authorized by: Khanh N Tran, HPTLC, R&D Supervisor, Alkemist Labs

Report Date: 02/12/21

ISO/IEC 17025



CERTIFICATE #3851.01

Note: Any unidentified lanes in the above chromatograms are confidential and may represent internal studies or other test samples not related to 1140201210. This report applies to the sample investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. This report is for the exclusive use of the party who requested the report and not for public dissemination or use by third parties, including for promotional purposes, without the prior written permission of Alkemist Labs, Inc. This report provides technical results for a specific sample and the report shall not be altered, modified, supplemented or abstracted in any manner. Any violation of these conditions renders the report and its results void. © 2021 Alkemist Labs, Inc. All Rights Reserved